On page 107, please delete the paragraph beginning on line 25 and ending on page 108, line 2, and replace with the following paragraph:

Oligonucleotides corresponding to sequences 5' of the CMV promoter (ATTACGGGGTCATTAGTTCATA) (SEQ ID NO:21) and 3' of the SV40 poly(A) addition sequence (TCTCGGTCTATTCTTTTGATTT) (SEQ ID NO:22) were used to amplify a 1.8 kb fragment corresponding to nucleotides 4721-1770 of pEGFP-C1 using Vent polymerase (New England Biolabs). Following agarose gel electrophoresis, the PCR fragment was isolated using QIAquick purification (Qiagen).

Please insert the attached Sequence Listing as new pages --112-116--.

IN THE CLAIMS

Please renumber the Claims pages from pages "112-118" to --117-123--.

IN THE ABSTRACT:

Please renumber the Abstract page from page "119" to --124--.

REMARKS

The specification has been amended to provide sequence identifiers. Applicant's amendments do not introduce new matter.

The Examiner has requested that a Sequence Listing be provided. Applicant submits this Amendment and Response to provide as a separate part of the disclosure, a "Sequence

Listing" pursuant to 37 C.F.R. §§ 1.821-1.825. Applicant submits herewith in paper copy and on floppy disk the Sequence Listing in computer readable form. The contents of the paper and computer readable copies are the same and include no new matter.

Dated: April 15, 2002

Jaen Andrews

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APPENDIX I

MARKED-UP VERSION OF SPECIFICATION'S REPLACEMENT PARAGRAPHS

The following is a marked-up version of the specification's replacement paragraphs pursuant to 37 C.F.R. §1.121(b) with markings showing changes made herein to the previous version of record of the specification.

IN THE SPECIFICATION

On page 96, please delete the paragraph beginning on line 18 and ending on page 97, line 9, and replace with the following paragraph:

These cell lines are used to determine conditions in which a control antisense PKCa phosphorothioate oligonucleotide (GTTCTCGCTGGTGAGTTTCA (SEQ ID NO:1); ISIS3521), included in STEP complexes, results in a decrease in expression of the PKCa-EGFP fusion protein. The efficacy of the oligonucleotide is first confirmed using standard antisense delivery methods (Dean, et al., J Biol Chem 269:16416-24 (1994)) to treat 60 mm dishes of normal HEK-293T cells followed by western blot analysis of PKCa protein levels. PKCa antibodies are commercially available for this purpose (Upstate Biotechnology, Inc.). Following confirmation of the efficacy of the PKCa antisense oligonucleotide, the same two-dimensional array analysis of the factors that alter transfection efficiency is employed as was utilized for plasmid DNA transfection (see Preliminary Results and Specific Aim 1A). Basically, the type of cationic lipid and protein included in the DNA complex is varied, as is the ratio of the various DNA complex components. Increased pressure enhances the effect of antisense oligonucleotides following STEP, similar to previous reports that pressure treatment increases the uptake of oligodeoxynucleotides (Mann, *et al., Proc Natl Acad Sci U S A* 96:6411-6 (1999)). For applying increased pressure, a small Plexiglas chamber with a sealed piston and a pressure gauge is constructed. The chamber is prewarmed to 37°C and filled with 5% CO_2. Each 10 cm tissue culture plate is treated at 1 to 3 atm pressure for 1 to 10 min, and the effect on STEP transfection efficiency is determined as described above.

On page 105, please delete Table 2, and replace with the following Table 2:

Table 2.

Selected Reporter Sequences for Functional Screening of Constitutively Active Protein Kinases

Reporter/Sequence	Transcription Factor	Reference
AP-1* (TGACTCA) (SEQ ID NO:2)	c-fos, junB, junD	Fisch *et al.*, 1989
CRE* (TGACGTCA) (SEQ ID NO:3)	CREB, CREM, etc.	Benbrook and Jones,
NF-kB*(GGGAATTCC) (SEQ ID NO:4)	NF-kB	1994
SRE* (60 nucleotides)	Elk-1	Lernbecher *et al.*,
p53* (GAAACTGAAACT) (SEQ ID NO:5)	p53	1993
ISRE*(AAACTGAAACTG) (SEQ ID NO:6)	Stat1, Stat2, IRF	Treisman, 1990
GAS*(AGTTTCATATTTACTCTAAATC) (SEQ ID NO:7)	Stat1	Oh *et al.*, 2000
NFAT* (GGAGGAAAAACTGTTCATACAGAAGGCGT) (SEQ ID NO:8)	NF-ATc; NF-ATp	Hiscott *et al.*, 1999
E-box* (CACGTCCACGTC) (SEQ ID NO:9)		Hiscott *et al.*, 1999
E2F* (CTTGGCGGGAGATAGAA) (SEQ ID NO:10)	c-myc	Northrop *et al.*, 1993
pRb* (60 nucleotides)	E2F-1,E2F-2,E2F-3	
Ets-1 (CCAGGAAG) (SEQ ID NO:11)	pRb	Blackwell *et al.*, 1990
Oct-1 (ATGCAAATGATAT) (SEQ ID NO:12)	Ets-1	Lam *et al.*, 1995
HNF3(CTAAGTCAATAAT) (SEQ ID NO:13)	Oct-1, Oct-2	Robbins *et al.*, 1990
C/EBPb (tgcagATTGCGCAATctgca) (SEQ ID NO:14)	HNF3	Uchijima *et al.*, 1994
CTF (gccAGCCAATgagcgc) (SEQ ID NO:15)	C/EBPb	Kamps *et al.*, 1990
Egr-1 (CGCCCTCGCCCCCGCGCCGGG) (SEQ ID NO:16)	CTF-NF1	Pani *et al.*, 1992
Delta Factor	Egr-1, WT1	Vinson *et al.*, 1993
(CCCCGCTGCCATC) (SEQ ID NO:17)		Altman *et al.*, 1994
NF-1	YY-1, F-ACT1, etc.	Cao *et al.*, 1990
(GTTATGGCGACTATCCAGCTTTGTG) (SEQ ID NO:18)		
HSF1 (GAAacCCCtgGAAtaTTcccGAC) (SEQ ID NO:19)	NF-1	Hariharan *et al.*, 1991
SIE (TTCCCGTAA) (SEQ ID NO:20)	HSF1	
	Stat1,2,3	Hale and Braithwaite,
		1995
		Abravaya *et al.*, 1991
		Boccaccio *et al.*, 1998

On page 107, please delete the paragraph beginning on line 25 and ending on page 108, line 2, and replace with the following paragraph:

Oligonucleotides corresponding to sequences 5' of the CMV promoter (ATTACGGGGTCATTAGTTCATA) (SEQ ID NO:21) and 3' of the SV40 poly(A) addition sequence (TCTCGGTCTATTCTTTTGATTT) (SEQ ID NO:22) were used to amplify a 1.8 kb fragment corresponding to nucleotides 4721-1770 of pEGFP-C1 using Vent polymerase (New England Biolabs). Following agarose gel electrophoresis, the PCR fragment was isolated using QIAquick purification (Qiagen).